

ABSTRACT

A TV phone in which a television and a portable cellular phone are integrally combined, comprising: a TV module for receiving and demodulating a desired TV channel signal to generate a composite video signal, a composite synchronizing signal and a composite audio signal; a mobile station radio frequency unit (MRFU) for demodulating a signal indicative of an incoming call received through a forward channel, forming an audio channel to output the demodulated signal, and modulating and transmitting a signal on a reverse channel; a TV control section for supplying a tuning signal to the TV module, synchronizing on screen display (OSD) data such as a graphic with the composite synchronizing signal to output a video signal; a mobile station processor (MSP) for establishing a phone or TV mode, generating a channel selection command signal, supplying display control data to the TV control section or interrupting a power supply voltage supplied to the TV module according to a preset incoming call alarm mode when receiving an incoming signal from the MRFU, and processing audio data outputted from and inputted to the MRFU; and a display unit for synchronizing the composite video signal and the video signal outputted with the composite synchronizing signal to display the synchronized signal on an image viewing screen.